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| 10/675,349 | 09/30/2003 | William E. Mazzara JR. | GP-304028 2760/134 | 5776 |

7590 03/18/2008

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| EXAMINER | |
|---|---|
| PHUONG, DAI | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2617 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/675,349 | MAZZARA, WILLIAM E. | |
| | Examiner | Art Unit | |
| | DAI A. PHUONG | 2617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *03 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-3,5,6,8 and 21-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-6, 8 and 21-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Reply Appeal Brief*

1. In view of the Appeal Brief filed on 12/03/2007, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection are set forth below. To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

***Response to Amendment***

2. Applicant's arguments, filed 04/03/2007, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claims 4, 7 and 9-21 have been canceled and claims 21-32 have been added in response filed on 04/03/2007. Claims 1-3, 5-6, 8 and 21-32 are currently pending.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 5-6, 8, 21-23 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odinak (Pub. No: 20050065779) in view of Myr (Pub. No: 20010029425).

Regarding claim 1, Odinak discloses a method for responding to digital vehicle requests, the method comprising:

receiving a voice query at a telematics unit in a vehicle (fig. 41 to fig. 61, [0189] to [0192]. Odinak discloses the system receives the user's voice (acoustical audio input) at user system 20. Furthermore, Odinak discloses in paragraph 205 that the user initiates a trip request by speaking a start trip request command into the microphone that is interpreted by voice recognition software executed by processor 20);

converting the voice query to a digital signal (fig. 41 to fig. 61, [0189] to [0192]. Odinak discloses the system performs front-end sound processing on the acoustical audio input using

processor 34, including converting the audio input to representative digital data. Furthermore, Odinak discloses in paragraph 205 that the initiated trip request causes TCU 14 to send the vehicle's GPS coordinates and any user entered instructions of the destination to server 16);

wherein transmitting the signal from the telematics unit to a computer-end recipient at a call center node in communication with an information database, wherein the digital signal is sent to the computer-end recipient at the call center node via a packet data protocol over a wireless network (fig. 41 to fig. 61, [0189] to [0192]. Odinak discloses once front-end sound processing is complete, at block 104 the system packages the digital data for wireless delivery. At block 106, the system transmits the packaged digital voice information from user system 20 to server system 40 via wireless data channel 60. Further, Furthermore, Odinak discloses in paragraph 203 that the network is preferably the Internet, but could be any public or private data network);

parsing the signal using the computer-end recipient at the call center node to determine an inquiry (fig. 41 to fig. 61, [0189] to [0192]. Odinak discloses server system 40 performs complete speech recognition processing on the digital voice information using server 42. As part of this process, the server attempts to match the digital voice information with corresponding digital data entries in the server database, which in turn are associated with a program instructional language. Furthermore, Odinak discloses in paragraph 205 that the server 16 interprets the voice instructions to determine the destination. Interpreting includes performing voice recognition processing. Next, at block 58, the server generates a trip plan according to vehicle navigation information such as stored map or other navigation information, the vehicle GPS coordinates, and the interpreted voice instructions of the destination);

accessing the information database based on the inquiry (Odinak discloses in paragraph 205 that the server generates a trip plan according to vehicle navigation information such as stored map or other navigation information, the vehicle GPS coordinates, and the interpreted voice instructions of the destination);

formulating at least one response to the inquiry using the computer-end recipient (fig. 61, Odinak discloses in paragraph 205 that the trip plan including the table is sent to the TCU);

transmitting the at least one formulated response format via the wireless network to the telematics unit (Fig. 61, Furthermore, Odinak discloses in paragraph 205 that the trip plan including the table is sent to the TCU); and

translating the at least one formulated response to an analog format for playback in the vehicle (Odinak discloses in paragraph 205 that the system may cache parts of a voice prompt that are later combined by processor 20 to create a navigation instruction. For example, TCU 14 receives the following voice prompts from server 16: (a) "turn left onto Howell Street"; (b) "turn left onto 4th Avenue").

However, Odinak does not disclose transmitting the at least one formulated response format ***via the digital packet data protocol*** over the wireless network to the telematics unit.

In the same field of endeavor, Myr disclose transmitting the at least one formulated response format ***via the digital packet data protocol*** over the wireless network to the telematics unit ([0101]. Myr discloses the navigation directions will be also returned via TCP/IP protocol in form of digital map and driving Text/Voice instructions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the telematic control unit of Odinak by specifically including disclose transmitting the at least one formulated response format ***via the digital packet data protocol*** over the wireless network to the telematics unit, as taught by Myr, the motivation being in order to make vehicle's equipment simpler and less costly.

Regarding claim 2, the combination of Odinak and Myr disclose all the limitations in claim 1. Further, Odinak discloses the method further comprising: optimizing the telematics unit for transmission of the voice query to a computer call center node (fig. 41 to fig. 61, [0189] to [0192]).

Regarding claim 3, the combination of Odinak and Myr disclose all the limitations in claim 1. Further, Odinak discloses the method the method further comprising: filtering the received voice query before converting it to the digital signal (fig. 41, [0189] to [0192]. Odinak discloses after performing noise- and echo-cancellation, processor 34 looks at the remaining amount of energy at the various frequencies and determines whether it contains actual user audio input, or user speech, as opposed to silence or other non-relevant noise).

Regarding claim 5, the combination of Odinak and Myr disclose all the limitations in claim 1. Further, Odinak discloses the method the method further comprising: transmitting the signal to the call center using a cellular packet data connection (fig. 41 to fig. 61, [0189] to [0192]).

Regarding claim 6, the combination of Odinak and Myr disclose all the limitations in claim 1. Further, Myr discloses the method further wherein transmitting the at least one formulated response via the digital packet data protocol over the wireless network to the

telematics unit comprises: transmitting the at least one formulated response in a digital streaming audio format (fig. 1, [0103]).

Regarding claim 8, the combination of Odinak and Myr disclose all the limitations in claim 1. Further, Myr discloses the method further wherein transmitting information via the wireless network further comprises transmitting information via an Internet protocol (fig. 1, [0165]).

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 22, the combination of Odinak and Myr disclose all the limitations in claim 21. Further, Odinak discloses the method further wherein the digital cellular packet data protocol is the digital cellular 3G packet data protocol (fig. 41 to fig. 61, [0189] to [0192]).

Regarding claim 23, the combination of Odinak and Myr disclose all the limitations in claim 21. Further, Odinak discloses the method further wherein the step of transmitting the digital signal to a remote computer-end recipient via a digital cellular packet data protocol, further comprises transmitting the digital signal via a digital streaming audio format (fig. 41 to fig. 61, [0189] to [0192]).

Regarding claim 27, the combination of Odinak and Myr disclose all the limitations in claim 21. Further, Odinak discloses the method wherein the parsing step further comprises transforming the digital signal into computer commands to determine the inquiry (fig. 41 to fig. 61, [0189] to [0192]).

Regarding claim 28, the combination of Odinak and Myr disclose all the limitations in claim 21. Further, Odinak discloses the method wherein the parsing step and formulating step are automated by the computer-end recipient (fig. 41 to fig. 61, [0189] to [0192]).

Regarding claim 29, the combination of Odinak and Myr disclose all the limitations in claim 21. Further, Odinak discloses the method wherein the presenting step further comprises converting the at least one formulated response to an analog signal and playing the signal as audio through at least one speaker in the vehicle ([0205]).

**5.** Claims 24-26 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odinak (Pub. No: 20050065779) in view of Myr (Pub. No: 20010029425) and further in view of Austin (U.S. 6236855).

Regarding claims 24 and 30, the combination of Odinak and Myr disclose all the limitations in claim 1. However, the combination of the combination of Odinak and Myr do not disclose the method further comprising the step of compressing the digital signal prior to the transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient.

In the same field of endeavor, Austin discloses the step of compressing the digital signal prior to the transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient (col. 1, line 15 to col. 2, line 34. The mobile station may also digitize, compress, add forward error protection, and transmit the compressed voice signal with forward error protection back to the base station. The Applicant stated on the Appeal Brief that the compression algorithm may compress the audio data at 2 to 3 times the compression ratio of human recognizable audio data compression. (Page 10, Lines 22-26) The response that is generated is also digital and may be directly encoded and compressed for a human end-recipient. (Page 11, Lines 22-23) Thus, the voice query digital signal is compressed

at a compression ratio that is at least twice (e.g., the stated 2 to 3 times) the compression ratio of the (human recognizable) response).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless telephone of the combination of Odinak and Myr by specifically including the step of compressing the digital signal prior to the transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient, as taught by Austin, the motivation being in order to conserve bandwidth within the RF transmission spectrum.

Regarding claims 25 and 31, the combination of Odinak and Myr and Austin disclose all the limitations in claim 24. Further, Austin discloses the method further comprising the step of compressing the at least one response (col. 1, line 15 to col. 2, line 34).

Regarding claims 26 and 32, the combination of Odinak and Myr and Austin disclose all the limitations in claim 24. Further, Austin discloses the method wherein the digital signal is compressed with a compression ratio at least twice the compression ratio used to compress the at least one response (col. 1, line 15 to col. 2, line 34).

**6.** Claims 24-26 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odinak (Pub. No: 20050065779) in view of Myr (Pub. No: 20010029425) and further in view of Heidari (U.S. 5854978).

Regarding claims 24 and 30, the combination of Odinak and Myr disclose all the limitations in claim 1. However, the combination of the combination of Odinak and Myr do not disclose the method further comprising the step of compressing the digital signal prior to the

transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient.

In the same field of endeavor, Heidari discloses the step of compressing the digital signal prior to the transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient (col. 8, lines 13-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wireless telephone of the combination of Odinak and Myr by specifically including the step of compressing the digital signal prior to the transmitting step to reduce the amount of data transmitted in the data packets from the vehicle to the computer-end recipient, as taught by Heidari, the motivation being in order to save bandwidth during intervals of heavy traffic. In addition, it provides the mode of compression is based on the available bandwidth and, accordingly, would be altered upon command of the base station to accommodate the narrow daytime bandwidth and the wide nighttime bandwidth.

Regarding claims 25 and 31, the combination of Odinak and Myr and Austin disclose all the limitations in claim 24. Further, Heidari discloses the method further comprising the step of compressing the at least one response (col. 8, lines 13-41)).

Regarding claims 26 and 32, the combination of Odinak and Myr and Austin disclose all the limitations in claim 24. Further, Heidari discloses the method wherein the digital signal is compressed with a compression ratio at least twice the compression ratio used to compress the at least one response (col. 8, lines 13-41).

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong
AU: 2617
Date: 03/04/08

/DUC NGUYEN/

Supervisory Patent Examiner, Art Unit 2617